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CLEVELAND, OH 44114

EXAMINER

PATEL, CHANDRAHAS B

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,283

Applicant(s)

GIBBS, FRASER

Examiner

Chandras Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Examiner is grateful to applicant for amending the specification to correct errors with reference numerals shown in drawing, thus withdraws objection to drawings.

Examiner is grateful to applicant for ending claim 25 with a period, thus withdraws objection to claim 25.

Amendment to claims necessitated finality of this rejection.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-7, 9, 13, 16, 17, 20, 22-29, 33, 37, 39, 41-44, 46, 48, 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879).

Regarding claim 1, Madour teaches a method of managing communications between a mobile device and a wireless network [**Abstract**], comprising: establishing a first general packet radio service (GPRS) mobile management (MM) context for the mobile device to enable communication with the wireless network [**Fig. 1, 100, Col. 3, lines 37-45**]; terminating the first GPRS MM context while the mobile device is in a non-communicative state [**Fig. 13, 1315 shows device is in non-communicative state with respect to network 1, Col. 6, lines 1-4**]; queuing a first set of data in a local data store associated with the first GPRS MM context [**Col. 5, lines 62-63**]; and queuing a second set of data in the local data store associated with the second GPRS MM context [**Col. 6, lines 8-10, the transferred data has to be buffered**].

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However, Madour does not teach making a decision to establish a second GPRS MM context to re-establish communication with the wireless network; deleting the first set of data associated with the first GPRS MM context.

Sinnarajah teaches making a decision to establish a second GPRS MM context to re-establish communication with the wireless network [Col. 11, lines 14-33]; deleting the first set of data associated with the first GPRS MM context [Col. 11, lines 31-47].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the first set of data associated with the first context if new service negotiation is required for new context [Col. 11, lines 14-16].

Regarding claims 2 and 25, Madour teaches non-communicative state is a result of a device being in an out-of-coverage [Fig. 5, mobile device is out-of-coverage with respect to SGSN₁].

Regarding claim 3, Madour teaches the first set of data associated with the first GPRS context includes user data [Col. 5, lines 65-67 – Col. 6, line 1].

Regarding claim 4, Madour teaches the first set of data associated with the first GPRS context includes network control data [Col. 3, lines 37-42].

Regarding claim 5, Madour teaches the first set of data associated with the first GRPS context includes a GPRS detach request [Fig. 4, 400].

Regarding claim 6, Madour teaches the first set of data associated with the first GRPS context includes a GPRS detach type [Col. 6, lines 10-14, detach type is attach to new network and delete old data].

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Regarding claim 7, Madour teaches the detach type includes a GPRS detach [Col. 6, lines 15-17].

Regarding claims 9 and 29, Madour teaches the first set of data includes a mobile device identifier [Col. 6, lines 61-66].

Regarding claim 13, Madour teaches the second set of data includes a GPRS attach request [Fig. 4, 415].

Regarding claim 16, Madour teaches the second set of data includes an attach type [Col. 6, lines 26-29].

Regarding claim 17, Madour teaches the decision to terminate the first GPRS context is made by a mobile device user [Fig. 13, 1315].

Regarding claims 20, Madour teaches the decision to establish the second GPRS context is made by a mobile device user [Fig. 13, 1315].

Regarding claim 22, Madour teaches the user data associated with the first GPRS context is re-associated to the second GPRS context [Fig. 13, 1320].

Regarding claim 23, Madour teaches the user data is re-associated with the second GPRS context by a software module on the mobile device [Fig. 13, 1335].

Regarding claim 24, Madour teaches a method for managing communications between a mobile device and a wireless network [Abstract], comprising: establishing a first packet data protocol (PDP) context for a mobile device to establish communication with the wireless network [Fig. 1, 100, Col. 3, lines 37-45]; terminating the first PDP context while the mobile device is in a non-communicative state [Fig. 13, 1315 shows device is in non-communicative state with respect to network 1, Col. 6, lines 1-4]; queuing a first set of data in a local data

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store associated with the first PDP context [Col. 5, lines 62-63]; and queuing a second set of data in the local data store associated with the second PDP context [Col. 6, lines 8-10, the transferred data has to be buffered].

However, Madour does not teach making a decision to establish a second PDP context for the mobile device to re-establish communication with the wireless network.

Sinnarajah teaches making a decision to establish a second PDP context for the mobile device to re-establish communication with the wireless network [Col. 10, lines 1-15].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to re-establish communication with the wireless network so that connection can be restored [Col. 10, lines 1-15].

Regarding claim 26, Madour teaches the first set of data associated with the first PDP context includes user data [Col. 5, lines 65-67 – Col. 6, line 1].

Regarding claim 27, Madour teaches the first set of data associated with the first PDP context includes network control data [Col. 3, lines 37-42].

Regarding claim 28, Madour teaches the first set of data associated with the first PDP context includes a GPRS detach request [Fig. 4, 400].

Regarding claim 33, Madour teaches the second set of data includes an activate PDP context request [Fig. 4, 435].

Regarding claim 37, Madour teaches the decision to terminate the first PDP context is made by a mobile device user [Fig. 13, 1315].

Regarding claim 39, Madour teaches the decision to establish the second PDP context is made by a mobile device user [Fig. 13, 1315].

Regarding claim 41, Madour teaches a method of managing communications between a mobile device and a wireless network [**Abstract**], comprising: establishing a first communication link between the mobile device and the wireless network [**Col. 3, lines 37-45**]; detecting that the mobile device is out-of-coverage with the wireless network [**Fig. 5, mobile device is out-of-coverage with respect to SGSN₁ and SGSN₁**]; terminating the first communication link [**Fig. 13, 1315 shows device is in non-communicative state with respect to network 1, Col. 6, lines 1-4**]; queuing data in the mobile device relating to the first communication link [**Col. 5, lines 62-63**]; receiving instructions to establish a second communication link between the mobile device and the wireless network [**Fig. 13, 1300**].

However, Madour does not teach deleting from the mobile device the queued data relating to the first communication link; the first and second communication links being to the same wireless network.

Sinnarajah teaches deleting from the mobile device the queued data relating to the first communication link [**Col. 11, lines 31-47**]; the first and second communication links being to the same wireless network [**Col. 11, lines 14-33**].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the first set of data associated with the first context if new service negotiation is required for new context [**Col. 11, lines 14-16**].

Regarding claim 42, Madour teaches the wireless network is a general packet radio service (GPRS) network [**Col. 3, lines 2-8**].

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Regarding claim 43, Madour teaches the first communication link includes a general packet radio (GPRS) service mobile management context for the mobile device [**Col. 5, lines 42-44, communication link is a GPRS context since the invention is in a GPRS environment**].

Regarding claim 44, Madour teaches the first communication link includes a packet data protocol (PDP) context for the mobile device [**Col. 3, lines 37-42**].

Regarding claims 46, Madour teaches the instructions to establish a second communication link are received from a mobile device user [**Fig. 13, 1315**].

Regarding claim 48, Madour teaches prior to terminating the first communication link, receiving instructions to terminate the first communication link [**Fig. 13, 1315, user equipment notifies to hand-off which is an instruction to terminate first communication link**].

Regarding claim 49, Madour teaches the instructions to terminate the first communication link are received from a mobile device user [**Fig. 13, 1315**].

3. Claims 8, 18, 21, 38, 40, 47, 50-52, 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Himmel et al. (USPN 7,080,405).

Regarding claim 8, the references teach a method as discussed in rejection of claim 5.

However, the references do not teach the first set of data includes a mobile device status flag.

Himmel teaches the first set of data includes a mobile device status flag [**Abstract**].

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a mobile device status flag so that improper I/O operation with the current power can be determined **[Abstract]**.

Regarding claim 18, the references teach the method as discussed in rejection of claim 1.

However, the references do not teach a decision to terminate the first GPRS context is made by a software module resident on the mobile device.

Himmel teaches a decision to terminate the first GPRS context is made by a software module resident on the mobile device **[Col. 3, lines 45-53, if I/O operation is not allowed the connection will be terminated]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have software module make a decision to terminate the GPRS context so that proper status flags can be checked by software module **[Col. 3, lines 45-53]**.

Regarding claim 21, the references teach the method as discussed in rejection of claim 21.

However, the references do not teach the decision to establish the second GPRS context is made by a software module resident on the mobile device.

Himmel teaches the decision to establish the second GPRS context is made by a software module resident on the mobile device **[Col. 3, lines 57-64]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to establish the second GPRS context based on software's decision on the mobile device so that various handheld devices could make such decisions **[Col. 7, lines 20-22]**.

Regarding claim 38, the references teach the method as discussed in rejection of claim 24.

However, the references do not teach a decision to terminate the first PDP context is made by a software module resident on the mobile device.

Himmel teaches a decision to terminate the first PDP context is made by a software module resident on the mobile device [Col. 3, lines 45-53, **if I/O operation is not allowed the connection will be terminated**].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have software module make a decision to terminate the PDP context so that proper status flags can be checked by software module [Col. 3, lines 45-53].

Regarding claim 40, the references teach the method as discussed in rejection of claim 24.

However, the references do not teach the decision to establish the second PDP context is made by a software module resident on the mobile device.

Himmel teaches the decision to establish the second PDP context is made by a software module resident on the mobile device [Col. 3, lines 57-64].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to establish the second PDP context based on software's decision on the mobile device so that various handheld devices could make such decisions [Col. 7, lines 20-22].

Regarding claim 47, the references teach the method as discussed in rejection of claim 41.

However, the references do not teach the instructions to establish a second communication link are received from a program executing on the mobile device user.

Himmel teaches the instructions to establish a second communication link are received from a program executing on the mobile device user **[Col. 3, lines 57-64]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to receive instructions to establish a second communication link from a program executing on the mobile device user so that various handheld devices could make such decisions **[Col. 7, lines 20-22]**.

Regarding claim 50, the references teach the method as discussed in rejection of claim 49.

However, the references do not teach the instructions to terminate the first communication link are received from a program executing on the mobile device user.

Himmel teaches instructions to terminate the first communication link are received from a program executing on the mobile device user **[Col. 3, lines 45-53, if I/O operation is not allowed the connection will be terminated]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to receive instructions to terminate the first communication link from a program executing on the mobile device user so that proper status flags can be checked by software module **[Col. 3, lines 45-53]**.

Regarding claim 51, Himmel teaches a mobile device for use in a wireless network **[Fig. 4, 140]**, comprising: a memory subsystem **[Fig. 4, 24]**; a communication subsystem operable to transmit and receive data over the wireless network **[Fig. 4, 128, 130]**; a processing subsystem

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coupled to the memory subsystem and the communication subsystem and operable to store and retrieve data in the memory subsystem, to execute instructions stored in the memory subsystem, and to cause the communication subsystem to transmit and receive data over the wireless network **[Fig. 4, 22, Col. 4, lines 52-58]**; and executable network management program code stored in the memory subsystem and comprising instructions operable to cause the mobile device to perform the method of mobile communication **[Col. 5, lines 35-43]**.

However, Himmel does not teach the method of claim 41.

the references teach the method of claim 41 as discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have mobile device with memory subsystem that performs the method of claim 41 so that operating system configured to execute the method can be stored in memory **[Col. 5, lines 29-30]**.

Regarding claim 52, the references teach the wireless network is a general packet radio service (GPRS) network **[Col. 3, lines 2-8]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a GPRS network since it's a typical IP based network **[Col. 1, lines 18-22]**.

Regarding claim 54, Himmel further teaches the memory subsystems includes a flash memory device and a random access memory device **[Col. 5, lines 26-29]**.

Regarding claim 55, Himmel further teaches the network management code is stored in the flash memory device **[Col. 5, lines 35-36]**.

Regarding claim 56, Himmel further teaches the data is queued in the RAM device **[Col. 3, lines 45-49]**.

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4. Claims 10-12, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Himmel et al. (USPN 7,080,405) and Sinnarajah et al. (USPN 7,180,879) as applied to claim 8 and 29 above, and further in view of Lupien et al. (USPN 6,463,055).

Regarding claim 10-12, 30-32, the references teach a method as discussed in rejection of claim 8 and claim 29.

However, the references do not teach the first data set includes

(Claims 10, 30) an international mobile subscriber identity (IMSI);

(Claim 11, 31) a packet temporary mobile subscriber identity (P-TMSI);

(Claim 12, 32) a temporary logical link identifier (TLLI).

Lupien teaches the first data set includes

(Claim 10, 30) an international mobile subscriber identity (IMSI) [Col. 7, lines 41-56];

(Claim 11, 31) a packet temporary mobile subscriber identity (P-TMSI) [Col. 9, lines 9-14];

(Claim 12, 32) a temporary logical link identifier (TLLI) [Col 9, lines 9-14].

It would have been obvious to one of ordinary skill in the art at the time the invention was made for first data set to include IMSI, P-TMSI and TLLI so that GPRS context can be established [Col. 9, lines 9-14].

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5. Claims 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Lupien et al. (USPN 6,463,055).

Regarding claims 14, 15, the references teach the method as discussed in rejection of claim 13.

However, the references do not teach the second data set includes

(Claim 14) an international mobile subscriber identity (IMSI);

(Claim 15) a packet temporary mobile subscriber identity (P-TMSI).

Lupien teaches the first data set includes

(Claim 14) an international mobile subscriber identity (IMSI) [Col. 7, lines 41-56];

(Claim 15) a packet temporary mobile subscriber identity (P-TMSI) [Col. 9, lines 9-14].

It would have been obvious to one of ordinary skill in the art at the time the invention was made for first data set to include IMSI, P-TMSI and TLLI so that GPRS context can be established [Col. 9, lines 9-14].

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Himmel et al. (USPN 7,080,405) as applied to claim 18 above, and further in view of Hachimura et al. (USPN 7,139,585).

Regarding claim 19, the references teach a method as discussed in rejection of claim 18.

However, the references do not teach the GPRS context is terminated based on the expiration of a software timer.

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Hachimura teaches the GPRS context is terminated based on the expiration of a software timer [Col. 4, lines 60-67].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to terminate GPRS context based on the expiration of a software timer so that it could be determined when to terminate the connection [Col. 16, lines 32-36].

7. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Muhonen (USPN 7,197,034).

Regarding claim 34, the references teach the method as discussed in rejection of claim 33.

However, the references do not teach the second set of data includes a network service point access identifier (NSAPI).

Muhonen teaches the second set of data includes NSAPI [Col. 6, lines 15-18].

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the second set of data to include a NSAPI so that mobile station can bind to various PDP addresses [Col. 5, lines 13-15].

Regarding claim 35, the references teach the method as discussed in rejection of claim 33.

However, the references do not teach the second set of data includes a PDP value.

Muhonen teaches the second set of data includes a PDP value [Col. 6, lines 15-18].

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It would have been obvious to one of ordinary skill in the art at the time the invention was made for the second set of data to include a PDP value so that mobile station can bind to various PDP addresses depending on the parameter values [Col. 5, lines 13-15].

Regarding claim 36, the references teach the method as discussed in rejection of claim 33.

However, the references do not teach the second set of data includes a PDP address.

Muhonen teaches the second set of data includes a PDP address [Col. 6, lines 15-18].

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the second set of data to include a PDP address so that mobile station can bind to various PDP addresses depending on the parameter values [Col. 5, lines 13-15].

8. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Ludwig et al. (USPN 6,816,471, Herein as Ludwig).

Regarding claim 45, the references teach a method as discussed in rejection of claim 41.

However, the references do not teach queuing data in the mobile device relating to the second communication link.

Ludwig teaches queuing data in the mobile device relating to the second communication link [Col. 9, lines 19-26].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to queue data in the mobile device so that only resegmentation on data will have to be done [Col. 9, lines 19-26].

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9. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (USPN 6,904,025) in view of Sinnarajah et al. (USPN 7,180,879) and Himmel et al. (USPN 7,080,405) as applied to claim 52 above, and further in view of Waugh (USPN 6,104,928).

Regarding claim 53, the references teach a mobile device as discussed in rejection 52.

However, the references do not teach a subscriber identity module (SIM) coupled to the processing subsystem and operable to store network identification information for the mobile device; wherein the processing subsystem is operable to retrieve the network identification information stored in the SIM.

Waugh teaches a subscriber identity module (SIM) coupled to the processing subsystem and operable to store network identification information for the mobile device [**Col. 6, lines 43-48**]; wherein the processing subsystem is operable to retrieve the network identification information stored in the SIM [**Col. 6, lines 58 – 67 - Col. 7, lines 1-20**].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have SIM coupled to processing system where processing system retrieves the network ID from SIM so that verification of the subscriber can be done to prevent access of unregistered users [**Col. 6, lines 60-62**].

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CBP

A handwritten signature in black ink, appearing to read "Ricky Q. Ngo", with a stylized, cursive script.

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER